

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A code division multiple access (CDMA) communication system using a common frequency band at a forward channel and a reverse channel, said CDMA communication system comprising:

a first detecting means for detecting an amount of traffic in said reverse channel to produce a first detected signal indicative of the amount of traffic in said reverse channel;

a first assigning means for assigning reverse spreading codes to said reverse channel, said first assigning means making, in response to said first detected signal, ~~number~~ a number of said reverse spreading codes change;

a second detecting means for detecting an amount of traffic in said forward channel to produce a second detected signal indicative of the amount of the traffic in said forward channel; and

a second assigning means for assigning forward spreading codes to said forward channel, said second assigning means making, in response to said second detected signal, ~~number~~ a number of said forward spreading ~~code~~ codes change.

2. (Currently Amended) A The CDMA communication system as claimed in claim 1, wherein said CDMA communication system is comprises a frequency hopping system.

3. (Currently Amended) A The CDMA communication system as claimed in claim 1, wherein said CDMA communication system is comprises a direct sequence system.

4. (Currently Amended) A The CDMA communication system as claimed in claim 1, wherein said first assigning means increases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is much, said first assigning

means ~~decreasing~~ decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

5. (Currently Amended) A The CDMA communication system as claimed in claim 1, wherein said second assigning means increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, said second assigning means ~~decreasing~~ decreases the number of said forward spreading codes when the amount of the traffic in said forward channel is little.

6. (Currently Amended) A code division multiple access (CDMA) communication method using a common frequency band at a forward channel and a reverse channel, said CDMA communication method comprising the steps of:

detecting an amount of traffic in said reverse channel to produce a first detected signal indicative of the amount of the traffic in said reverse channel;

assigning reverse spreading codes to said reverse channel to make, in response to said first detected signal, number of said reverse spreading codes change;

detecting an amount of traffic in said forward channel to produce a second detected signal indicative of the amount of the traffic in said forward channel; and

assigning forward spreading codes to said forward channel to make, in response to said second detected signal, number of said forward spreading ~~code~~ codes change.

7. (Currently Amended) A The CDMA communication method as claimed in claim 6, wherein said CDMA communication method ~~is carried out in~~ comprises a frequency hopping system.

8. (Currently Amended) A The CDMA communication method as claimed in claim 6, wherein said CDMA communication system ~~is carried out in~~ comprises a direct sequence system.

9. (Currently Amended) A The CDMA communication method as claimed in claim 6, wherein the step of assigning said reverse spreading codes increases the number of

said reverse spreading codes when the amount of the traffic in said reverse channel is much, and the step of assigning said reverse spreading codes ~~decreasing~~ decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

10. (Currently Amended) A The method as claimed in claim 6, wherein the step of assigning said forward spreading codes increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, and the step of assigning said forward spreading codes decreases the number of said forward spreading codes when the amount of the traffic in said forward channel is little.

11. (Currently Amended) A code division multiple access (CDMA) communication system comprising a mobile station and a base station which communicate with each other using a common frequency band at a forward channel and a reverse channel,

said mobile station comprising:

a mobile detecting means for detecting an amount of traffic in said reverse channel to produce a reverse traffic detected signal indicative of the amount of the traffic in said reverse channel; and

a mobile assigning means for assigning reverse spreading codes to said reverse channel, said mobile assigning means making, in response to said reverse traffic detected signal, the number of said reverse spreading codes change,

said base station ~~comprising;~~ comprising:

a base detecting means for detecting an amount of traffic in said forward channel to produce a forward traffic detected signal indicative of the amount of the traffic in said forward channel; and

a base assigning means for assigning forward spreading codes to said forward channel, said base assigning means making, in response to said forward traffic detected signal, the number of said forward spreading ~~code~~ codes change.

12. (Currently Amended) A The CDMA communication system as claimed in claim 11, wherein said CDMA communication system ~~is~~ comprises a frequency hopping system.

13. (Currently Amended) A The CDMA communication system as claimed in claim 11, wherein said CDMA communication system ~~is~~ comprises a direct sequence system.

14. (Currently Amended) A The CDMA communication system as claimed in claim 11, wherein said mobile assigning means increases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is much, and said mobile assigning means ~~decreasing~~ decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

15. (Currently Amended) A The CDMA communication system as claimed in claim 11, wherein said base assigning means increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, and said base assigning means ~~decreasing~~ decreases the number of said forward spreading codes when the amount of the traffic in said forward channel is little.

16. (Currently Amended) A method of communicating between a mobile station and a base station in a code division multiple access (CDMA) communication system using a common frequency band at a forward channel and a reverse channel, said method comprising the steps of:

detecting, in said mobile station, traffic in said reverse channel to produce a reverse traffic detected signal indicative of the amount of the traffic in said reverse channel;

assigning, in said mobile station, reverse spreading codes to said reverse channel to make, in response to said reverse traffic detected signal, the number of said reverse spreading codes change;

detecting, in said base station, traffic in said forward channel to produce a forward traffic detected signal indicative of the amount of the traffic in said forward channel; and

assigning, in said base station, forward spreading codes to said forward channel to make, in response to said forward traffic detected signal, the number of said forward spreading ~~code~~ codes change.

17. (Currently Amended) A The method as claimed in claim 16, wherein said CDMA communication system is comprises a frequency hopping system.

18. (Currently Amended) A The method as claimed in claim 16, wherein said CDMA communication system is comprises a direct sequence system.

19. (Currently Amended) A The method as claimed in claim 16, wherein the step of assigning said reverse spreading codes increases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is much, and the step of assigning said reverse spreading codes decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

20. (Currently Amended) A The method as claimed in claim 16, wherein the step of assigning said forward spreading codes increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, and the step of assigning said forward spreading codes ~~decreasing~~ decreases the number of said forward spreading codes when the amount of the traffic in said forward channel is little.

21. (Currently Amended) A mobile station for use in a code division multiple access (CDMA) communication system comprising a base station which communicates with said mobile station using a common frequency band at a forward channel and a reverse channel, said mobile station comprising:

a detecting means for detecting an amount of traffic in said reverse channel to produce a detected signal indicative of the amount of the traffic in said reverse channel; and

an assigning means for assigning reverse spreading codes to said reverse channel, said assigning means making, in response to said detected signal, the number of said reverse spreading codes change.

22. (Currently Amended) A mobile station as claimed in claim 21, wherein said CDMA communication system is comprises a frequency hopping system.

23. (Currently Amended) A The mobile station as claimed in claim 21, wherein said CDMA communication system is comprises a direct sequence system.

24. (Currently Amended) A The mobile station as claimed in claim 21, wherein said assigning means increases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is much, and said assigning means ~~decreasing~~ decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

25. (Currently Amended) A base station for use in a code division multiple access (CDMA) communication system comprising a mobile station which communicates with said base station using a common frequency band at a forward channel and a reverse channel, said base station comprising:

a detecting means for detecting an amount of traffic in said forward channel to produce a detected signal indicative of the amount of the traffic in said forward channel; and

an assigning means for assigning forward spreading codes to said forward channel, said assigning means making, in response to said ~~forward traffic~~ detected signal, the number of said forward spreading ~~code~~ codes change.

26. (Currently Amended) A The base station as claimed in claim 25, wherein said CDMA communication system is comprises a frequency hopping system.

27. (Currently Amended) A The base station as claimed in claim 25, wherein said CDMA communication system is comprises a direct sequence system.

28. (Currently Amended) A The base station as claimed in claim 25, wherein said assigning means increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, and said assigning means ~~decreasing~~ decreases the

number of said forward spreading codes when the amount of the traffic in said forward channel is little.

29. (Currently Amended) A method of assigning reverse spreading codes in a mobile station for use in a code division multiple access (CDMA) communication system using a common frequency band at a forward channel and a reverse channel, said method comprising the steps of:

detecting an amount of traffic in said reverse channel to produce a detected signal indicative of the amount of the traffic in said reverse channel; and

assigning, in response to said detected signal, said reverse spreading codes to said reverse channel so as to make the number of said reverse spreading ~~code~~ codes change.

30. (Currently Amended) A The method as claimed in claim 29, wherein said CDMA communication system ~~is~~ comprises a frequency hopping system.

31. (Currently Amended) A The method as claimed in claim 29, wherein said CDMA communication system ~~is~~ comprises a direct sequence system.

32. (Currently Amended) A method as claimed in claim 29, wherein the step of assigning said reverse spreading codes increases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is much, and the step of assigning said reverse spreading codes ~~decreasing~~ decreases the number of said reverse spreading codes when the amount of the traffic in said reverse channel is little.

33. (Currently Amended) A method of assigning forward spreading codes in a base station for use in a code division multiple access (CDMA) communication system using a common frequency band at a forward channel and a reverse channel, said method comprising the steps of:

detecting an amount of traffic in said forward channel to produce a detected signal indicative of the amount of the traffic in said forward channel; and

assigning, in response to said detected signal, said forward spreading codes to said forward channel so as make the number of said forward spreading ~~code~~ codes change.

34. (Currently Amended) A The method as claimed in claim 33, wherein said CDMA communication system is comprises a frequency hopping system.

35. (Currently Amended) A The method as claimed in claim 33, wherein said CDMA communication system is comprises a direct sequence system.

36. (Currently Amended) A The method as claimed in claim 33, wherein the step of assigning said forward spreading codes increases the number of said forward spreading codes when the amount of the traffic in said forward channel is much, and the step of assigning said forward spreading codes ~~decreasing~~ decreases the number of said forward spreading codes when the amount of the traffic in said forward channel is little.

37. (New) A code division multiple access (CDMA) communication system using a common frequency band at a forward channel and a reverse channel, said CDMA communication system comprising:

a first detector for detecting an amount of traffic in said reverse channel to produce a first detected signal indicative of the amount of traffic in said reverse channel;

a first assigning unit for assigning reverse spreading codes to said reverse channel, said first assigning unit making, in response to said first detected signal, a number of said reverse spreading codes change;

a second detector for detecting an amount of traffic in said forward channel to produce a second detected signal indicative of the amount of traffic in said forward channel; and

a second assigning unit for assigning forward spreading codes to said forward channel, said second assigning unit making, in response to said second detected signal, a number of said forward spreading codes change.

38. (New) A code division multiple access (CDMA) communication system comprising a mobile station and a base station which communicate with each other using a common frequency band at a forward channel and a reverse channel,

said mobile station comprising:

a mobile detector that detects an amount of traffic in said reverse channel to produce a reverse traffic detected signal indicative of the amount of traffic in said reverse channel; and

a mobile assigning unit that assigns reverse spreading codes to said reverse channel, said mobile assigning unit making, in response to said reverse traffic detected signal, a number of said reverse spreading codes change,

said base station comprising:

a base detector that detects an amount of traffic in said forward channel to produce a forward traffic detected signal indicative of the amount of traffic in said forward channel; and

a base assigning unit that assigns forward spreading codes to said forward channel, said base assigning unit making, in response to said forward traffic detected signal, a number of said forward spreading codes change.

39. (New) A mobile station for use in a code division multiple access (CDMA) communication system comprising a base station which communicates with said mobile station using a common frequency band at a forward channel and a reverse channel, said mobile station comprising:

a detector that detects an amount of traffic in said reverse channel to produce a detected signal indicative of the amount of traffic in said reverse channel; and

an assigning unit that assigns reverse spreading codes to said reverse channel, said assigning unit making, in response to said detected signal, a number of said reverse spreading codes change.

40. (New) A base station for use in a code division multiple access (CDMA) communication system comprising a mobile station which communicates with said base station using a common frequency band at a forward channel and a reverse channel, said base station comprising:

a detector that detects an amount of traffic in said forward channel to produce a detected signal indicative of the amount of traffic in said forward channel; and

an assigning unit that assigns forward spreading codes to said forward channel, said assigning unit making, in response to said detected signal, a number of said forward spreading codes change.